

FORM PTO-1449	SERIAL NO. 09/669, 818	CASE NO. 5050/802
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT	FILING DATE 9/26/2000 herewith	GROUP ART UNIT (unassigned) 2621
(use several sheets if necessary)	APPLICANT(S): John A. Hossack et al.	

REFERENCE DESIGNATION U.S. PATENT DOCUMENTS

EXAMINE R INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS/ SUBCLASS	FILING DATE
de	A1	Re. 30,397	09/1980	King	600/443	
	A2	4,841,977	06/1989	Griffith et al.	600/439	
	A3	4,917,097	04/1990	Proudian, deceased et al.	600/463	
	A4	4,947,852	08/1990	Nassi et al.	600/465	
	A5	5,000,185	03/1991	Yock	600/459	
	A6	5,070,879	12/1991	Herres	600/444	
	A7	5,081,993	01/1992	Kitney et al.	600/455	
	A8	5,107,837	04/1992	Ophir, et al.	600/437	
	A9	5,107,844	04/1992	Kami et al.	600/463	
	A10	5,161,535	11/1992	Short, et al.	600/437	
	A11	5,161,537	11/1992	Hashimoto et al.	600/463	
	A12	5,186,176	02/1993	Hiki et al.	600/447	
	A13	5,186,177	02/1993	O'Donnell et al.	600/463	
	A14	5,199,437	04/1993	Langberg	600/463	
	A15	5,211,176	05/1993	Ishiguro et al.	600/463	
	A16	5,257,629	11/1993	Kitney et al.	600/463	
	A17	5,273,045	12/1993	Chihara et al.	600/463	
	A18	5,305,104	04/1994	Jensen, et al.	600/473	
	A19	5,320,105	06/1994	Bonnefous et al.	600/454	
	A20	5,325,860	07/1994	Seward et al.	600/468	
	A21	5,327,895	07/1994	Hashimoto et al.	600/459	
	A22	5,345,940	09/1994	Seward et al.	600/463	
	A23	5,368,037	11/1994	Eberle et al.	600/463	
	A24	5,377,682	01/1995	Ueno et al.	600/446	
	A25	5,379,642	01/1995	Reckwerdt et al.	73/625	
	A26	5,380,411	01/1995	Schlieff	204/157	
	A27	5,381,067	01/1995	Greenstein et al.	310/334	
	A28	5,384,594	01/1995	Sieber et al.	348/169	
	A29	5,386,830	02/1995	Powers et al.	600/455	
	A30	5,396,285	03/1995	Hedberg et al.	348/163	
	A31	5,398,691	03/1995	Martin et al.	128/660-06	
	A32	5,402,793	04/1995	Gruner et al.	128/660-1	
	A33	5,409,688	04/1995	Quay	424/952	
	A34	5,410,205	04/1995	Gururaja	310/328	
de	A35	5,410,516	04/1995	Uhlendorf et al.	367/7	

EXAMINER David G. H.	DATE CONSIDERED 5-16-01
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REFERENCE DESIGNATION

U.S. PATENT DOCUMENTS

EXAMINE R INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS/ SUBCLASS	FILING DATE
<i>de</i>	A36	5,417,213	05/1995	Prince	<i>367/17</i>	
	A37	5,417,214	05/1995	Roberts et al.	<i>600/413</i>	
	A38	5,425,366	06/1995	Reinhardt et al.	<i>600/413</i>	
	A39	5,433,207	07/1995	Pretlow, III	<i>600/458</i>	
	A40	5,435,311	07/1995	Umemura et al.	<i>600/458</i>	
	A41	5,438,554	08/1995	Seyed-Bolorforosh et al.	<i>600/439</i>	
	A42	5,443,071	08/1995	Benjamin et al.	<i>600/140</i>	
	A43	5,456,255	10/1995	Abe et al.	<i>606/455</i>	
	A44	5,456,257	10/1995	Johnson et al.	<i>600/443</i>	
	A45	5,456,259	10/1995	Barlow et al.	<i>600/458</i>	
	A46	5,464,851	11/1995	Lipschultz	<i>600/459</i>	
	A47	5,469,849	11/1995	Sasaki et al.	<i>604/373</i>	
	A48	5,471,988	12/1995	Fujio et al.	<i>600/443</i>	
	A49	5,471,990	12/1995	Thirsk	<i>606/439</i>	
	A50	5,474,073	12/1995	Schwartz et al.	<i>600/455</i>	
	A51	5,479,926	01/1996	Ustuner et al.	<i>128/661.1</i>	
	A52	5,482,046	01/1996	Deitrich	<i>600/440</i>	
	A53	5,487,388	01/1996	Rello et al.	<i>600/458</i>	
	A54	5,492,125	02/1996	Kim et al.	<i>128/660.09</i>	
	A55	5,497,776	03/1996	Yamazaki et al.	<i>600/443</i>	
	A56	5,503,153	04/1996	Liu et al.	<i>600/445</i>	
	A57	5,515,853	05/1996	Smith et al.	<i>600/454</i>	
	A58	5,517,537	05/1996	Greene et al.	<i>600/437</i>	
	A59	5,523,058	06/1996	Unemura et al.	<i>376/252</i>	
	A60	5,526,816	06/1996	Arditi	<i>423/128</i>	
	A61	5,529,070	06/1996	Augustine et al.	<i>600/458</i>	
	A62	5,531,224	07/1996	Ellis et al.	<i>600/443</i>	
	A63	5,538,004	07/1996	Bamber	<i>600/437</i>	
	A64	5,540,909	07/30/1996	Schutt	<i>128/916</i>	
	A65	5,558,091	09/1996	Acker et al.	<i>424/952</i>	
	A66	5,558,092	09/24/1996	Unger et al.	<i>600/424</i>	
	A67	5,560,364	10/01/1996	Porter	<i>600/439</i>	
	A68	5,566,674	10/1996	Weng	<i>600/458</i>	
	A69	5,568,813	10/29/1996	Dietrich et al.	<i>606/443</i>	
	A70	5,570,691	11/05/1996	Wright et al.	<i>600/437</i>	
	A71	5,575,286	11/1996	Weng et al.	<i>600/447</i>	
<i>de</i>	A72	5,575,290	11/19/1996	Teo et al.	<i>600/444</i>	
	A73	5,577,505	11/26/1996	Brock-Fisher et al.	<i>600/456</i>	

EXAMINER <i>Daniel G. M.</i>	DATE CONSIDERED <i>5-16-00</i>
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FORM PTO-1449	SERIAL NO. <i>04/669,818</i> unassigned	CASE NO. 5050/802
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT	FILING DATE herewith	GROUP ART UNIT unassigned <i>2621</i>
(use several sheets if necessary)	APPLICANT(S): John A. Hossack et al.	

REFERENCE DESIGNATION

U.S. PATENT DOCUMENTS

EXAMINE R INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS/ SUBCLASS	FILING DATE
<i>de</i>	A74	5,579,768	12/03/1996	Klesenski	<i>600/442</i>	
	A75	5,579,770	12/03/1996	Finger	<i>600/442</i>	
	A76	5,580,575	12/03/1996	Unger et al.	<i>424/450</i>	
	A77	5,582,173	12/1996	Li	<i>600/443</i>	
	A78	5,588,435	12/31/1996	Weng et al.	<i>600/443</i>	
	A79	5,590,659	01/1997	Hamilton et al.	<i>600/447</i>	
	A80	5,601,085	02/11/1997	Ostensen et al.	<i>600/458</i>	
	A81	5,601,086	02/11/1997	Pretlow, III et al.	<i>600/458</i>	
	A82	5,606,975	03/1997	Liang et al.	<i>600/462</i>	
	A83	5,608,690	03/04/1997	Hossack et al.	<i>367/138</i>	
	A84	5,608,849	03/1997	King, Jr.	<i>345/419</i>	
	A85	5,612,713	03/18/1997	Bhuva et al.	<i>345/84</i>	
	A86	5,617,862	04/08/1997	Cole et al.	<i>600/453</i>	
	A87	5,628,322	05/13/1997	Mine	<i>600/443</i>	
	A88	5,632,277	05/27/1997	Chapman et al.	<i>600/459</i>	
	A89	5,655,535	08/12/1997	Friemel et al.	<i>600/443</i>	
	A90	5,678,554	10/21/1997	Hossack et al.	<i>600/459</i>	
	A91	5,696,737	12/09/1997	Hossack et al.	<i>367/138</i>	
	A92	5,699,805	12/1997	Seward et al.	<i>345/459</i>	
	A93	5,704,361	01/1998	Seward et al.	<i>600/459</i>	
	A94	5,713,363	02/1998	Seward et al.	<i>600/437</i>	
	A95	5,724,976	03/10/1998	Mine et al.	<i>600/459</i>	
	A96	5,724,978	03/1998	Tenhoff	<i>128/916</i>	
	A97	5,735,281	04/07/1998	Rafter et al.	<i>600/458</i>	
	A98	5,776,067	07/1998	Kamada et al.	<i>600/443</i>	
	A99	5,797,849	08/25/1998	Vesely et al.	<i>600/461</i>	
	A100	5,876,342	03/02/1999	Chen et al.	<i>600/443</i>	
	A101	5,891,039	04/1999	Bonnefous et al.	<i>600/454</i>	
	A102	5,899,861	05/04/99	Friemel et al.	<i>600/443</i>	
	A103	5,903,319	05/1999	Busko, et al.	<i>382/300</i>	
<i>✓</i>	A104	5,920,660	07/1999	Goto	<i>382/300</i>	
<i>de</i>	A105	5,933,547	08/1999	Dudon, et al.	<i>382/300</i>	
<i>de</i>	A106	6,059,727	05/2000	Fowlkes et al.	<i>600/443</i>	

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS/ SUBCLASS	TRANSLATION YES NO
<i>de</i>	A107	EP 0 357 164	<i>3/1999</i> Unknown	EPO (UK)		

EXAMINER <i>Daniel G. H.</i>	DATE CONSIDERED <i>5-16-01</i>
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(use several sheets if necessary)	APPLICANT(S): John A. Hossack et al.	

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS/ SUBCLASS	TRANSLATION YES	NO
de	A108	EP 077-352 A1	05/02/1997	EPO			
de	A109	WO 97/00482	01/1997	PCT		x	
de	A110	WO 98/25509	06/18/1998	PCT			

EXAMINER INITIAL	OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)	
de	A111	"B&K 8558 transducer and B&K 8557 transducer", B&K Medical product brochure, (date unknown), 1 page
	A112	Powerpace Enhancement Package, product brochure (date unknown), 1 page
	A113	U.S. Serial No. 08/874,792 filed 06/12/97.
	A114	Born, N. et al., "Early and Recent Intraluminal Ultrasound Devices" (1989), pp. 78-88.
	A115	Rosenfield, K. et al., "Three-Dimensional Reconstruction of Human Coronary and Peripheral Arteries From Images Recorded During Two-Dimensional Intravascular Ultrasound Examination" <i>Circulation</i> (1991) Vol. 84, No. 5, pgs. 1938-1956.
	A116	Gussenhoven, E. et al., "Displacement Sensing Device Enabling Accurate Documentation of Catheter Tip Position," <i>Intravascular Ultrasound</i> (1993), pp. 157-166.
	A117	O'Donnell, M. et al., "Synthetic Phased Array Imaging of Coronary Arteries with an Intraluminal Array," <i>IEEE Ultrasonics Symposium</i> (1995), pp. 1251-1254.
	A118	Shaulov, A. et al., "Biplane Phased Array for Ultrasonic Medical Imaging" (1988), pp. 635-638.
	A119	Chiang C. Mei et al., "Parametric resonance of a spherical bubble." <i>J. Fluid Mech.</i> Vol. 229 (1991).
	A120	V.L. Newhouse et al., "Bubble size measurements using the nonlinear mixing of two frequencies." <i>J. Acoust. Soc. Am.</i> 75 (5), May 1984.
	A121	Janet B. Jones-Oliveira et al., "Transient fluid - solid interaction of submerged spherical shells revisited: Proliferation of frequencies and acoustic radiation effects." <i>Acoustical Society of America</i> , 96(2) Pt. 1, August 1994.
	A122	Chandra M. Sehgal, Ph.D. et al., "Sonographic Enhancement of Renal Cortex by Contrast Media." <i>J. Ultrasound Med.</i> , 14 (1995).
	A123	"Abstract Session IV Contrast and Ischemia" and "Poster session A New Technologies." <i>Journal of the American Society of Echocardiography</i> , Vol. 8, No. 3, May 1995.
	A124	Chandra M. Sehgal, Ph.D. et al., "Influence of Postprocessing Curves on Contrast - Echographic Imaging: Preliminary Studies." <i>J. Ultrasound Med.</i> , 14 (1995).
	A125	Deborah J. Rubens, M.D. et al., "Sonoelasticity Imaging of Prostate Cancer: In Vitro Results." <i>Radiology</i> , Vol. 995, No. 2 (1995).
	A126	Kotaro Sato et al., "Numerical analysis of a gas bubble near a rigid boundary in an oscillatory pressure field." <i>J. Acoustical Society of America</i> , 95 (5), May 1994.
	A127	L. W. Anson et al., "Ultrasonic scattering from spherical shells including viscous and thermal effects." <i>J. Acoustical Society of America</i> , 93 (4), April 1993.
de	A128	B. Schrope et al., "Simulated Capillary Blood Flow Measurement Using A Nonlinear Ultrasonic Contrast Agent," <i>Ultrasonic Imaging</i> 14 (1992).

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EXAMINER INITIAL	OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)	
de	A129	Fred Lee, Jr., M.D. et al., "Sonoelasticity Imaging: Results in in Vitro Tissue Specimens." Radiology, Vol. 181, No. 1 (1991).
	A130	Kevin J. Parker, Ph.D. et al., "Sonoelasticity of Organs: Shear Waves Ring a Bell." J. Ultrasound Med., 11 (1992).
	A131	William Armstrong, M.D. et al., "American Society of Echocardiography Position Paper on Contrast Echocardiography." Draft 1 - 6/6/94.
	A132	K. J. Parker et al., "Tissue Response to Mechanical Vibrations for 'Sonoelasticity Imaging'." Ultrasound in Med. & Biol., Vol. 16, No. 3 (1990).
	A133	Robert M. Lerner et al., "'Sonoelasticity' Images Derived from Ultrasound Signals in Mechanically Vibrated Tissues." Ultrasound in Med. & Biol., Vol. 16, No. 3 (1990).
	A134	J. Ophir et al., "Elastography: A Quantitative Method for Imaging the Elasticity of Biological Tissues." Ultrasonics Imaging 13 (1991).
	A135	J. A. Hossack et al., "Improving transducer performance using multiple active layers." SPIE Vol. 1733 (1992).
	A136	Volkmar Uhlendorf et al., "Nonlinear Acoustical Response of Coated Microbubbles in Diagnostic Ultrasound." 1994 Ultrasonics Symposium.
	A137	John A. Hossack et al., "Improving the Characteristics of a Transducer Using Multiple Piezoelectric Layers." IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, Vol. 40, No. 2, March 1993.
	A138	H. Edward Karrer et al., "A Phased Array Acoustic Imaging System for Medical Use." 1980 Ultrasonic Symposium.
	A139	"HP Ultrasound Technologies - Viability." About HP Ultrasound Imaging, WWW document (1997).
	A140	Ted Christopher, "Finite Amplitude Distortion-Based Inhomogeneous Pulse Echo Ultrasonic Imaging." IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, Vol. 44, No. 1, Jan. 1997.
	A141	"Supplement to Journal of the American College of Cardiology" American College of Cardiology, 45 th Annual Scientific Session, March 24-27, 1996, pgs. 21A, 63A, 239-240A.
	A142	Yang-Sub Lee et al., "Time-domain modeling of pulsed finite-amplitude sound beams." 1995 Acoustical Society of America, 97 (2), Feb. 1995.
	A143	Michalakakis A. Averkiou et al., "Self-demodulation of amplitude-and frequency-modulated pulses in a thermoviscous fluid." J. Acoustical Society of America, 94 (5), Nov. 1993.
	A144	Nico de Jong, "Physical Properties and Technical Aspects of Ultrasound Contrast Agents." (one page)
	A145	"Small Spheres Lead to Big Ideas." Research News, Science Vol. 267, 20 Jan. 1995.
	A146	Excerpt from Ultrasonics: Fundamentals and Applications (1992), pgs. 380-393, 363-65.,
✓	A147	Paul R. Detmer et al., "3D Ultrasonic Image Feature Localization Based on Magnetic Scanhead Tracking: In Vitro Calibration and Validation" (Ultrasound in Med. & Biol., Vol. 20, No. 9, pp. 923-936, 1994).
de	A148	Daniel F. Leotta et al., "Three-Dimensional Ultrasound Imaging Using Multiple Magnetic Tracking Systems and Miniature Magnetic Sensors."

EXAMINER Daryl G. H.	DATE CONSIDERED 5-16-01
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EXAMINER INITIAL	OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)	
de	A149	Bhaskar S. Ramamurthy et al., "Potential and Limitations of Angle-Independent Flow Detection Algorithms Using Radio-Frequency and Detected Echo Signals" (Ultrasonic Imaging 13, 252-268, 1991, p. 252).
	A150	M. Belohlavek et al., "Multidimensional Ultrasonic Visualization in Cardiology" (Ultrasonics Symposium pp. 1137-1145, 1992)
	A151	Laurence N. Bohs, "A Novel Method for Angle Independent Ultrasonic Imaging of Blood Flow and Tissue Motion," (IEEE Transactions on Biomedical Engineering, Vol. 38, No. 3, March 1991)
	A152	Timothy C. Hodges et al., "Ultrasonic Three-Dimensional Reconstruction: In Vitro and In Vivo Volume and Area Measurement" (Ultrasound in Med. & Biol., Vol. 20, No. 88, pp. 719-729, 1994)
	A153	Hugh A. McCann, et al. "Multidimensional Ultrasonic Imaging for Cardiology" (Proceedings of the IEEE, Vol. 76, No. 9, September 1988)
	A154	Elizabeth O. Ofili et al., "Three-Dimensional and Four-Dimensional Echocardiography" (Ultrasound in Med. & Biol., Vol. 20, No. 8, pp. 669-675, 1994)
	A155	Dan Sapoznikov et al., "Left Ventricular Shape, Wall Thickness and Function Based On Three-Dimensional Reconstruction Echocardiography", (0276-6574/87; p. 495)
	A156	Shinichi Tamura et al., "Three-Dimensional Reconstruction of Echocardiograms Based on Orthogonal Sections" (Pattern Recognition; Vol. 18, No. 2, pp. 115-124, 1985)
	A157	J. Souquet et al., "Transesophageal Phased Array for Imaging for the Heart" (IEEE Transactions on Biomedical Engineering, Vol. BME-29, No. 10, October 1982)
de	A158	"L64720 Video Motion Estimation Processor" (MEP), LSI LOGIC.
de	A159	"ISO/IEC Standard" (MPEG Video) 11/25/91
de	A160	SIEMENS Sonoline® Elegra Ultrasound Imaging Platform and Extended Filed View XFOV™ Imaging (Nov. 1995)

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